

**Notice of Allowability**

Application No.

09/917,958

Examiner

Insun Kang

Applicant(s)

BARSNESS ET AL.

Art Unit

2193

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/11/2005.
2. ☒ The allowed claim(s) is/are 1-36.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

### EXAMINER'S AMENDMENT

1. An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance. During a telephone conversation conducted on 4/11/2006, Mr. Stewart requested an extension of time for one MONTH(S) and authorized the Director to charge Deposit Account No. 09-0465 the required fee for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jon Stewart (Reg. 54,945) on 4/7/2006, 4/10/2006, and 4/11/2006.

The application has been amended as follows:

1. (Currently Amended) A computer-implemented method of displaying an optimized ~~version of~~ source code, the method comprising:  
generating, in a first language, from optimized object code, the optimized ~~version of~~ source code, wherein the optimized ~~version of~~ source code corresponds to an original ~~version of the~~ source code, in the first language, modified to reflect an a compiler optimization in the optimized object code; and  
displaying both the original source code and the optimized version of source code on an output device to visually distinguish changes in ~~to~~ the original ~~version of the~~ source code ~~in accordance to a compiler optimization~~, relative to the compiler optimization of the optimized source code version.
12. (Currently Amended) A computer-implemented method of displaying compiler optimized source code, comprising:  
generating ~~an object code from an original version of~~ source code, wherein the original source code is composed in a first language;  
optimizing the object code to produce an ~~optimized object code~~;  
decompiling the optimized object code to produce an ~~optimized version of the~~ source code, in the first language, wherein the optimized ~~version of~~ source code corresponds to an ~~the original version of the~~ source code, modified to reflect an a compiler optimization in the optimized object code; and

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simultaneously displaying the optimized source code and the original source code in separate windows of a user interface on an output device to visually indicate a change to the original source code as a result of the optimizing.

16. (Currently Amended) An apparatus for displaying ~~an optimized version of~~ source code, the apparatus comprising:

a memory for storing a program editor, a compiler program, and a decompiler program;

an output device for displaying the optimized ~~version of~~ source code; and

a processor, for executing the program editor, the compiler program, and the decompiler program, the processor being configured to:

generate, from optimized object code, the optimized ~~version of~~ source code in a first language, wherein the optimized ~~version of~~ source code corresponds to ~~an original version of the source code, in the first language~~,

modified to reflect ~~an a compiler~~ optimization in the optimized object code, and

display, on provide, to the output device, both the original source code and the optimized version of the source code to visually distinguish changes to the original version of the source code in accordance to a compiler optimization, relative to the compiler optimization of the optimized source code version.

20. (Currently Amended) A computer readable medium storing a software program that, when executed by a processor of a computer, causes the computer to perform operations comprising:

generating, in a first language, from optimized object code, the optimized ~~version of~~ source code, wherein the optimized ~~version of~~ source code corresponds to ~~an original version of the source code, in the first language~~, modified to reflect ~~an a compiler~~ optimization in the optimized object code; and

displaying both the original source code and the optimized version of source code on an output device to visually distinguish changes ~~in to the original version of the source code in accordance to a compiler optimization~~, relative to the compiler optimization of the optimized source code version.

32. (Currently Amended) A computer readable medium storing a software program which ~~that~~, when executed by a processor of a computer, causes the computer to perform operations comprising:

generating ~~an object code from an original source code~~ composed in a first language, using a compiler;

optimizing the object code to produce ~~an optimized object code~~;

decompiling the optimized object code to produce ~~an optimized source code, in the first language~~, corresponding to the original version of the source code; and

simultaneously displaying the optimized source code and the original source code in separate windows of a user interface on an output device to visually indicate a change to the original source code as a result of the optimizing.

These amendments were necessary in order to further clarify the claims and obviate any rejection under 35 U.S.C. 112 2<sup>nd</sup>.

***Examiner's Statement of Reason(s) for Allowance***

2. Claims 1-36 are allowed.
3. The following is an examiner's statement of reasons for allowance:

The closest prior arts of record, i.e. Rieschl, Bradley, taken alone or in combination, fail to teach or fairly suggest at least: simultaneously displaying the optimized source code and the original source code on an output device to visually indicate a change to the original source code as a result of the compiler optimization as recited in the independent claims 1, 12, 16, 20, and 32.

While Rieschl a GUI having a high-level language window, a machine language window, and a command window (Fig 2), Rieschl's decompiler decompiles the machine code binary module into human readable computer machine language text, therefore the human readable computer machine language text displayed is not in the same high-level language. Ultimately, Rieschl does not disclose simultaneously displaying the optimized source code and the original source code on an output device to visually indicate a change to the original source code as a result of the compiler optimization.

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While Bradely discloses the source code text which has been decompiled from a listing of byte codes, ultimately, Bradely does not disclose simultaneously displaying the optimized source code and the original source code on an output device to visually indicate a change to the original source code as a result of the compiler optimization.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Insun Kang whose telephone number is 571-272-3724. The examiner can normally be reached on M-F 7:30-4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on 571-272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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